

EX - POST EVALUATION REPORT OF PILOT ACTIONS WITH RECOMMENDATIONS FOR THE CONSOLIDATION OF SERVICES

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1. INTRODUCTION

The overall objective of the MOSES project (Maritime and multimodal transport Services based on Ea Sea-way project) is to improve maritime and multimodal transport services between Italy and Croatia, through the capitalisation of the results of the EA SEA-WAY project, towards quality and sustainable cross-border connections. Its specific objectives aim to improve sustainable maritime transport routes for passengers between Italy and Croatia, passengers services and passengers safety in the ports, as well as to improve multimodal connections to hinterland.



Figure 1: The area of the Interreg V-A Italy-Croatia CBC Programme 2014 - 2020
 Source: Interreg V-A Italy-Croatia Cross – Border Cooperation Programme 2014 – 2020

Implementation of defined project activities is linked to the Programme specific objective 4.1, as it contributes to improving environmentally friendly and low-carbon transport systems, including maritime transport, ports and multimodal links, in order to promote sustainable local and regional mobility. The project contributes also to the indicative actions of the relevant priority, as it promotes short sea shipping and maritime transport services through piloting and studying the feasibility of CBC maritime transport routes for passengers and multimodal transport systems through innovative solutions in connection with ports.

One of the work packages, work package 5, foresees the collection of all information about project pilot activities that allow the assessment of their effectiveness or revisions if they are necessary. This report contains the ex-post evaluation of pilot activities (D 5.2.2) with recommendations for the consolidation of services.

II. EVALUATION OF THE PROJECT PILOT ACTIONS

2.1 Maritime fast-line transport service for passengers between Trieste, Istria and M. Lošinj

The Friuli-Venezia-Giulia pilot action developed in the MOSES project is the new maritime connection represented by the hydrofoil maritime passenger line between Trieste, Istria and Primorsko - Goranska County. This service was available from July 1st 2018 to September 7th 2018, with two connections per week (on Fridays and on Mondays), for a total number of 18 round trips, of which 9 along the axis Trieste – Pula - Mali Lošinj and 9 along the axis Trieste – Rovinj - Mali Lošinj. These services transported a total number of 2.381 passengers. The sailing schedule of both connections made possible to the passengers to extend their trips to Susak, using the existing lines of Jadrolinija company from and to Mali Lošinj.



Figure 2: Passengers waiting to be embarked in the Port of Mali Lošinj

Source: Project MOSES Report on data collection (D 5.1.1)

Mentioned pilot action was implemented for a period of two months, from July 1st until September 7th and that limited duration influenced the total number of transported passengers. Some technical problems occurred during the starting phase, which were due mostly to the age of the hydrofoil vessel, but nonetheless no deviations occurred. However, during the project

implementation it appeared necessary to provide more opportunities to passengers who were travelling using intermodality sea-bicycle, increasing the maximum number of bicycles, which could be transported by the hydrofoil vessel, according to safety and security regulations in force. The solution found for some specific trips was the reduction of the passengers' seats in the lower deck for making more room available for embarking a higher number of bicycles.

2.2 Flexible mobility hub for maritime passengers in Ravenna

The scope of the MOSES pilot action in Ravenna was to design, implement and test an innovative service of electric bikes aimed to promote sustainable intermodality solutions among the Ravenna port area and the Ravenna city centre. The activation of the service during the summer 2018 was not easy from both technical, procurement and management point of view.

From the operative point of view the pilot action was managed by the Ravenna Cruise Terminal, Ravenna Terminal Passeggeri (RTP), the concessionaire of this public owned terminal. RTP is part of Global Ports Holding, one of the most important independent operator of cruise terminals in the world, with a consolidated presence in the Mediterranean, Atlantic and in the Asia-Pacific regions.



Figure 3: Photo of the Ravenna Cruise Terminal
Source: Project MOSES Report on data collection (D 5.1.1)

The mobile hub was planned as a flexible and low cost hub for the electric bikes storage and maintenance. In relation to the electric bikes used for the testing phase in Ravenna, different kinds of bikes were used in order to cover all the different kind of requirements and considering the average age of users in Ravenna port area is quite high. For these reasons, male and female city bikes models were selected in order to be able to fit the target groups requirements. The pilot was conducted during the Summer-Autumn 2018 and it was fully activated in mid-July 2018 due to the long time required for the electric bikes procurement activities and the transformation of a 40' container in a "mobile hub", supporting the sharing service in the Ravenna cruise terminal and the maintenance activities.

Main problem tackled by the Moses pilot activities in Ravenna was the sand reducing the Ravenna port accessibility during the testing period. Due to this problem, the number of ships arriving in the Ravenna port decreased compared to the foreseen 2018 arrivals. In particular, the eight biggest cruise ships foreseen for the 2018 summer period did not berth in Ravenna, together with several smaller ones.

Another relevant problem not related to the project but with a relevant impact on MOSES results was related to the growing number of touristic private bus tours organized by the cruise companies. Due to these organized touristic tours, sold before the arrival of the ships in the port, several tourists had no choice on their transport solutions in Ravenna port. The large part of the tourists arriving in Ravenna used these private touristic buses to reach the Ravenna city centre.

2.3 Reconstruction of the quay and elaboration of technical documentation for the reconstruction of the coastal wall in the Port of Susak

Before the start of the MOSES project, the Primorsko - Goranska County used a submarine for the elaboration of the overwater images needed to document the existing conditions of the quay. On the base of these data, a technical plan for the renovation of the quay in Port of Susak was defined. This plan was made in 2016 and it determined the bad state of the quay that began to bend.

On July 24th 2018, Port Authority of Mali Lošinj delivered a new report on the recorded conditions of the Port of Susak quay reviewing the intervention economic quantification. The conducted analysis showed that the quay was deteriorated, particularly in the surface inclination and abyss of the moles, deformations in the underwater stone part and foundations, the separation of stone blocks along the entire millstone and deterioration of the full structure. VAT. Reconstruction works started in the first part of December 2018 and finished on June 19th 2019.



Figure 4: Reconstructed quay in the Port of Susak
Source: Project MOSES Report on data collection (D 5.1.1)

Elaborated technical documentation for the reconstruction of the coastal wall enabled the Mali Lošinj Port Authority to plan the future investment in the Port of Susak.

2.4 Geotechnical analysis of the seabed of the port of Pula

The pilot action implemented by the Region of Istria foreseen the analysis of the geomorphological composition of the seabed and in-depth examination of the coastal zone in the area of the cape Guc Valelunga within the Port of Pula, using the modern examination technology of the stone substrate and specialized acoustic systems.



Figure 5: Location of the pilot activity in the Port of Pula

Source: Feasibility Study for the construction of the passenger terminal in Pula, page no. 11

Main objectives of the pilot activity tend to contribute to the quality improvement of passenger services in the Programme area by taking effective measures at the port terminals, as well as to create necessary preconditions for the construction of the new passenger terminal in the Port of Pula and further sustainable development of cross - border maritime passenger transport.

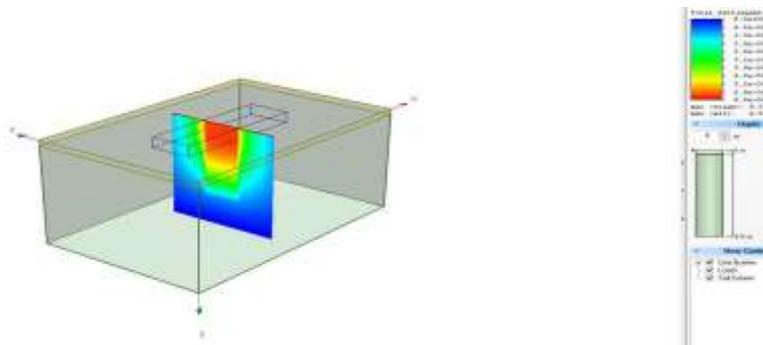


Figure 6: The scheme of geotechnical laboratory analysis

Source: Geotechnical Study, page no. 25

In the framework of the public procurement procedure, competent department of the Region of Istria selected the service provider that successfully implemented the service and elaborated the Geotechnical Study. Its most significant conclusions emphasize that the examined seabed in the Port of Pula is composed of three layers (sand, clay, limestone), which have geotechnical stability, so they are suitable for the construction of the new passenger terminal.



Figure 7: The area of the examination works
Source: Geotechnical Study, page no. 10

III. RECCOMENDATIONS FOR THE CONSOLIDATION OF SERVICES

Regarding the pilot action of the Autonomous Region of Friuli Venezia Giulia, it is important to emphasize the need of supporting that kind of cross-border services by:

- specific agreements amongst the decision makers of the area, starting at the level of Memorandum of Understanding;
- setting up of stakeholders permanent platforms, arranging meetings with the most relevant stakeholders on public and private side, for better understanding the needs and the opportunities given by such cross-border maritime connections, and for better fine-tuning the service itself and its promotion.

In relation to the Ravenna pilot action, the quantitative data collected demonstrated that the use of light electric vehicles in a sharing mobility services allowed to cover in a reliable, efficient and attractive way long trip distances. Moreover, the use of electric vehicles is an attractive, reliable and sustainable solution for aged tourists arriving in the port areas. Electric bikes could be a valuable solution for aged people and those with reduced mobility not able to use traditional bikes and/or traditional public transport vehicles. The light electric vehicles are also a suitable and reliable solution in providing and promoting intermodal and sustainable transport solutions in urban and low density/peripheral urban areas. In fact light electric vehicles allows an easy integration with existing public transport offer (both buses and urban ferries) and potentially also with trains for longer distances. In the Ravenna case study the existence of a cycle path connecting the port area to the historical city centre had a fundamental role.

Pilot activities of the Primorsko -Goranska County implemented within the MOSES project showed the necessity of continuous investments in the reconstruction and improvement of port infrastructure using the European Union, national, regional and local funds.

Considering the fact that the pilot action of the Region of Istria has been implemented timely and completely in accordance with the service contract and other procurement documentation, it is necessary to use the produced Geotechnical Study for the elaboration of Conceptual Project and Main Project for the construction of the passenger terminal in the Port of Pula, as a precondition for further sustainable development of cross - border maritime passenger transport in the Programme area and the Adriatic – Ionian Region.

IV. CONCLUSIONS

According to the rules of the Interreg V-A Italy – Croatia Cross-border Cooperation Programme 2014 – 2020 and the provisions of the MOSES project Application Form, all project pilot actions have been implemented completely and timely. Their realization will contribute to the achievement of the project overall objective and specific objectives focused on the improvement of maritime and multimodal transport services between Italy and Croatia, through the capitalisation of the results of the EA SEA-WAY project, towards sustainable cross-border connections.

This Ex-post Evaluation Report has been elaborated by the Region of Istria in cooperation with all other project partners, on the base of the Report on Data Collection and Report on Surveys realized by the Institute for Transport and Logistics (PP3).